National Food Animal Identification Task Force

- Participating Organizations -

American Association of Bovine Practitioners
American Association of Swine Veterinarians
American Dairy Goat Association
American Farm Bureau Federation
American Meat Institute
American Veal Association
American Veterinary Medical Association
Cooperative State Research, Education, and Extension
Council on Dairy Cattle Breeding
FDA Center for Veterinary Medicine
Federation of Animal Science Societies
International Livestock Identification Association
Livestock Marketing Association
National Assembly of State Animal Health Officials
National Association of State Departments of Agriculture
National Cattlemen's Beef Association
National Institute for Animal Agriculture
National Livestock Producers Association
National Milk Producers Federation
National Pedigreed Livestock Council
National Pork Board
National Pork Producers Council
National Renderers Association
North American Deer Farmers Association
North American Elk Breeders Association
R-Calf USA
United States Animal Health Association
USDA, Animal and Plant Health Inspection Service, Veterinary Services
USDA Food Safety Inspection Service
USDA, AMS, Livestock and Seed Program

- International Resources -

Canadian Cattle Identification Agency

For more information regarding the Work Plan contact:

National Institute for Animal Agriculture (NIAA)
1910 Lyda Avenue
Bowling Green, KY 42104
Phone: (270) 782-9798 Fax: (270) 782-0188

The complete Work Plan document is available in PDF format at:
www.animalagriculture.org/id

- SUMMARY -

National Identification Work Plan

November 2002

Developed by:
National Food Animal Identification Task Force

Coordinated by:
National Institute for Animal Agriculture

Background

The National Food Animal Identification Task Force was established in April, 2002. Numerous industry organizations along with state and federal animal health officials participated in the development of the National Identification Work Plan. This booklet provides a summary of the Work Plan and references the specific recommendations that provided direction to its structure. The complete 34 page document can be obtained by contacting NIAA (see back cover).

Priority

"Maintaining the health of the US herd is the most urgent issue… therefore, is the most significant focus of the National Identification Work Plan."

Long-term Objective

In the event of a foreign animal disease incursion to the US, timely traceback of animals is the key to rapid recovery. This capability is critical to maintain a financially viable industry and is the basis for the following long-term objective:

> ***To establish an animal identification and information system that has the capability to identify all premises that had direct contact with a foreign animal disease (FAD) within 48-hours after discovery.***

The 48-hour, long-term objective is the principle foundation that guided the development of the recommendations contained in the Work Plan. Realizing the tremendous challenge of achieving this goal, the Task Force established a phase-in plan that would allow the industry to work toward this objective over time.

Current Status and Next Steps

The United States Animal Health Association, at its October 2002 annual meeting, accepted the Work Plan and adopted a resolution that requested USDA, APHIS to establish an Identification Development Team that would utilize the Work Plan as a guide to establish a national program for the United States (see back inside cover for the resolution).

The Work Plan is being circulated throughout the industry for additional comment through March 31, 2003 that will be considered by the National Identification Development Team.

Submit comments through an organization of your preference (see back cover), or directly to:

National Food Animal Identification Task Force
c/o NIAA
1910 Lyda Avenue
Bowling Green, KY 42104-5809

Other Species

Each species group will develop implementation plans that support the overall national program. Some species, sheep in particular, have recently initiated identification programs to support specific issues.

GOVERNANCE

The implementation of the National Food Animal Identification Plan has been described in phases which extend over several years. In addition, once fully implemented, maintenance of the National Identification System will be an ongoing process. Due to unforeseeable issues, inevitable change in production practices, and vast species differences, continued producer input and oversight will be imperative.

Industry Oversight

A Review Board will provide input to APHIS for the administration of the Animal Identification Number. Other issues associated with a national ID plan must also be addressed. Thus, in addition to the Review Board, species-specific oversight groups will be appointed by industry to provide APHIS expertise and guidance in regards to identification issues impacting their particular species.

Freedom of Information Act

Producers have rightfully expressed concern regarding access to information that is compiled through the proposed identification and information system. In response to this concern, it has been agreed to that the such databases be exempt from the Freedom of Information Act (FOIA) and/or held by private companies.

USAHA 2002 Resolution

SUBJECT MATTER: ESTABLISHMENT OF A JOINT FEDERAL AND STATE GOVERNMENT, USAHA AND INDUSTRY ANIMAL IDENTIFICATION DEVELOPMENT TEAM

RESOLUTION:

The United States Animal Health Association accepts the National Identification Work Plan (NIWP) report as a guide to establishing a national animal identification program and system. The USAHA requests USDA-APHIS establish, by January 2003, a joint Federal and State government and industry animal identification development team that will use the NIWP as a guide to develop a national animal identification program and system that will enhance animal disease monitoring, surveillance, control and eradication in the United States.

A draft plan should be presented for review to industry and other groups by June of 2003 and for review at the USAHA annual meeting in San Diego, California in October 2003.

Phase I - Enhancement

Phase I addresses improvements that can be made in swine identification for the purpose of disease management. In synergy with the cattle plan, the primary objective of Phase I is to implement the national premises system. This phase will require, as a minimum, the application of premises identification in all replacement breeder swine as they enter the breeding herd. Thus, a standardized national premises identification system must be in place. Alternatively, the replacement supplier may prefer to use official identification tags with the Animal Identification Number. Therefore, the allocation of such numbers and the official tags bearing such numbers must be offered when Phase I is initiated.

Identification of market swine to their last premises rather than the owner is an important aspect of efficient disease surveillance at slaughter. This enhancement can be accomplished by providing producers and packers with the tools to record last premises ID at the plant. Again, a standardized national premises identification system must be in place to accomplish this objective.

Phase II - Group/Lot ID

In lieu of official Group/Lot ID, Phase II.A. requires that production records truly exist within a swine production system to internally track all group pig movements and be able to make those records available to USDA if a significant animal health event occurs. USDA has previously determined production records to be appropriate identification in 9CFR 71.19.

- Group/Lot Identification

As described in the standards, Group/Lot ID will be a combination of the Premises ID number identifying the location where the group was created and the date the group was assembled. Pork producers using production records to track group movements will be encouraged to employ the standard for Group/Lot ID. This practice will provide a unique number for each group and allow tracking of groups on a national level.
The current vision for this system is a group "passport" system identifying all the premises in which the group has had direct contact.

- Electronic Identification Option

An electronic ID (EID) system must be designed for groups/lots of animals to ensure data accuracy and provide producers with a seamless and time efficient method to record group data. Essentially, a group of pigs would be electronically identified as a lot similar to EID in an individual animal. One unique EID would be associated with a designated group/lot of pigs. This system would enhance the real-time data recording process.

Phase III - Tracking

The reporting of animal movements and locations provides the necessary data to accomplish animal tracking. As the Electronic Movement Permit system becomes available, the first priority will be to report interstate movement, followed by intrastate movements. As the infrastructure is established throughout the production chain, the options used to automate the collection of such data increases. The completeness of the information will continue to progress and the reliability for 48-hour traceback will increase.

Introduction

The Need for Animal Identification

Many issues warrant the establishment of a national identification system; most important is the infrastructure it brings to the animal information system necessary to maintain a financially viable industry. Maintaining the health of the U.S. herd is the most urgent issue for the industry and animal health officials to address, and therefore, is the most significant focus of the National Identification Plan. Establishing the requirements for animal identification that provide the necessary infrastructure to monitor animal diseases, to support their control or eradication, and to establish an adequate emergency management response system provides the foundation of the "system" for the national program.

What is "National" Animal Identification?

National Identification is an identification system that, through established standards and defined data elements, allows for the compatibility of systems while providing the efficient availability of agreed-to information across each segment of the animal agriculture industry.

Standardization of Essential Components

To achieve the 48-hour traceback goal, the movement of individual animals, or "units of animals", must be recorded into a central database, or a seamlessly linked database infrastructure.

The key data elements requiring standards include:
- a uniform premises identification system
- a uniform, nationally recognizable numbering system for individual animal identification
- a uniform, nationally recognizable numbering system for a lot or group of animals

Additionally, standards are required for identification devices to ensure minimum performance standards are achieved as well as standards associated with the integration of automated data collection systems. Such standards include:
- visual identification methods and devices for official use in livestock
- electronic identification methods and devices for official use in livestock

The National Identification Task Force met numerous times in meeting and phone conferences from May through October, 2002 to develop the ID Work Plan.

Premises Identification

A 48-hour traceback system requires the need to record an animal's (or unit of animals) origin and its movement to other locations for its entire life. The system must also have the ability to determine the contacts a specific animal had with other animals at the premises, including other production units, markets, exhibitions, and public sales. Identifying these premises with a single and unique number is imperative to have the ability to trace animals and to determine what animals came in contact with a subject animal. If more than one location identifier (premises identification number) is used for the same location, animals subject to contagious disease can go undetected. Therefore, the establishment of a unique location identifier is required by the National Identification System.

Premises ID is a key data element and must be standardized for all animal production operations as well as animal holding facilities, markets and processing facilities. The diversity of the environments in which we manage livestock makes the definition of such locations quite complex. For simplicity, the following guideline will be used to define location:

> *"A premises is a location operated by an entity that participates in food animal production and/or commerce that is, in the judgment of the State Animal Health Official or Area Veterinarian in Charge, epidemiologically and/or geographically distinct from other livestock production units."*

The major point of importance is that the unique premises number provides the information system with the ability to associate an animal (or unit of animals) and its contacts to a given farm/ranch, market, etc. More detailed information about the location will be allowed to an authorized user; ie., contact person, address, phone number, etc.

To support traceback functions, communication with individuals responsible for the premises must be made in a timely manner. While often the owner of the operation, the legal ownership of the location is not the requirement of the system. Rather, the name of the person on record is the person that is to be contacted when a traceback is performed. The entity that registers the premises determines who the appropriate contact person is. Additional information, such as address, phone, etc., provides the ability to establish communication with a production unit/operation where an animal is or has been located.

Standard #1: National Premises Identification Number
The National Premises Identification System provides a unique number across the entire United States and links the entity that participates in food animal production and/or commerce. For database purposes, the field specification for the National Premises Identification number is defined as:

- 8 characters (two alpha state postal code plus six characters)
- Example: WI123456

The USDA, APHIS, VS is to provide a centralized National Premises Identification database for all premises that each state issues along with the associated information for each premises. This "master" premises database provides for the immediate lookup of any premises in the entire country. Such database is to be exempt

Phase II - Individual ID

Phase II.A. requires the use of the Animal Identification Number (AIN) on all bovines. The utilization of official visual identification tags will be the standard requirement. However, official RFID tags qualify and may be used when preferred by the producer.

Phase II.B. provides the transition to RFID technology by requiring the attachment of RFID tags to an animal that is leaving its current premises and destined to another premises with a different number, unless already tagged with an official visible tag.

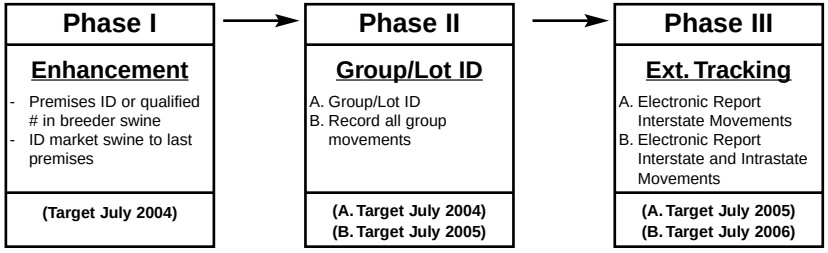
Phase III - Tracking

The reporting of animal movements and locations provides the necessary data to accomplish animal tracking. The interstate movements of cattle are reported through the integration of the Electronic Movement Permit System. As the infrastructure is established throughout the production chain, the options used to automate the collection of such data increases; i.e., RFID readers at markets, slaughter plants, etc.

Swine

The swine industry has had mandatory identification requirements since 1988. These requirements encompass swine movements in interstate commerce and interstate swine movements within a production system. In addition, market swine are identified back to their owner at federally inspected plants. Thus, in regards to swine identification, interstate movements are already being tracked. It should also be recognized that most market swine are tracked as groups for production management purposes and detailed group movement records exist today. Although most producers track group movements, a standard for Group/Lot ID will provide other producers with a mechanism to adopt this concept, give this valid swine identification method national credibility, and embrace the national premises ID system.

Pork producers are aware that certain enhancements can be made to the current identification system to further protect the national herd. Three phases are recommended to improve traceback in pork production for disease management purposes.



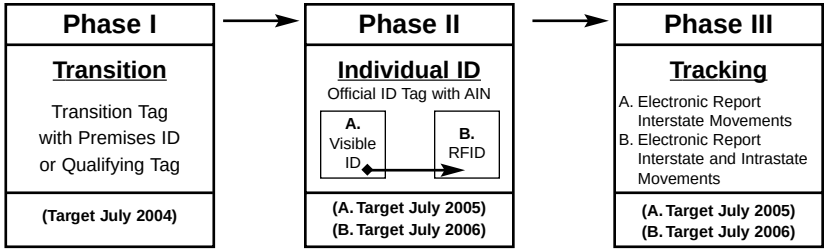
PHASE-IN PLANS

The Task Force, realizing the urgency to advance animal identification and acknowledgment that the achievement of the 48-hour traceback system will require years to implement, has designed a phase-in plan to advance the national program. The status of identification varies among each species as does their needs, and thus, have separate implementation plans.

In each phase, events or objectives are defined. To ensure the system functions beyond the livestock operation, the requirements of the system must be determined and accomplished by the target dates.

Cattle

Three primary phases are established to progress towards the 48-hour traceback system.



Phase I - Transition

Phase I provides the initial transition from our current system to that of the future. The primary objective of Phase I is to implement the national premises system. This is achieved by requiring, as a minimum, premises identification for all cattle that enter commerce and is accomplished through the utilization of "Transition Tags" as the minimum. The Transition Tags will have the Premises ID number reflecting the current premises where the animal is located when tagged.

Other forms of identification that qualify or meet the requirements are those that provide the ability to link an official individual number to the Premises that the official number was allocated to. Some producers might prefer to use official identification tags with the Animal Identification Number versus Transition Tags. Therefore, the allocation of such numbers and the official tags bearing such numbers must be offered when Phase I is initiated. Additionally, the use of RFID technology that meets criteria for official devices must be accepted in Phase I.

The Transition Tag, or other qualifying method of identification, must be attached to the animal before it leaves its current premises when destined for a premises with a different Premises ID number. Exceptions to the requirements might include:

- fed cattle moving from a feedlot direct to a slaughter plant
- cattle moved to another premises when they remain under the same person's control and are not co-mingled with cattle from other premises.

from the Freedom of Information Act (FOIA) and/or held by a private company. This database will also be a key component of an electronic health certificate system and will ensure that the system "feeds" the database(s) that records animal movements.

Animal Identification

Two types or levels of ID are necessary to support animal disease management programs; individual animal and "group/lot" identification. Individual animal identification is needed for animal disease programs for species where animals born on the same premises are not likely to move through the production chain as one group. While certain traceback functions could be achieved with Premises ID alone, point of origin for example, it cannot be used to record an individual animal's movement to different production points. Thus, to achieve the 48-hour traceback goal, individual animal identification is required for livestock that move through the production chain as individuals.

In species where groups of animals within a barn, lots, pens, etc., move as a complete unit from the point of origin to slaughter, the need to identify the group as a unit is required (not the individual animals within the group). Such groups are referred to within this document as a "unit of animals" and can reflect a particular lot, pen, barn, etc., of animals that originate from a single premises. In such scenarios, the tracking of such animals is achieved by recording the movement of the "unit of animals". The identification number for a unit of animals is referred to as "Group/Lot ID".

Individual Animal Numbers

The industry agrees that a national numbering system is most desirable when individual ID is required. However, with several "official" numbering systems in use today, achieving a single national numbering system can only be accomplished through a planned transition. The standard for the single national numbering system should be:

- compatible with national numbering systems already established in other countries
- avoid duplication of any existing numbers

Current numbering systems considered official for the interstate movement of livestock include:

- USDA uniform state series code
- Breed registration numbers
- Premises ID used in combination with a unique herd management ID

Additionally, the American Identification number is to be recognized as an official number in the Code of Federal Regulations (CFR) in the near future.

The 48-hour long-term goal, most likely, will require the use of Radio Frequency Identification (RFID) technology to automate the recording of animal movements. Therefore, the code structure of the transponder as defined by the international standard (ISO 11784) is an appropriate format for both electronic and visible identification.

Standard #2: Individual Animal Numbering System
To support the successful transition to RFID technology, it is recommended that the National Identification System adopt the ISO code structure as the standard for the country's national numbering system (same code structure for RFID codes and visual national numbers).

This number, referred to as the Animal Identification Number (AIN) is defined as:

- 3 numeric character field for the country code (840 for the United States)
- 12 numeric character field for the national number

Note: Both fields stored and transferred in numeric format. The country code alpha characters (USA) would be printed on official ID devices.

To avoid duplication of existing numbers, the numbers will start at 2,000,000,000. All numbers defined within the CFR that were produced will remain official to prevent any animal from having to be re-identified.

Group/Lot Numbers
The most common use of Group/Lot ID is within the swine industry when feeder pigs are assembled and managed as a group from that point forward. In such cases, the individual pigs will not be identified, rather the group will have a unique number associated with it.

Standard # 3: Group/Lot Identification Numbering System
Group/Lot ID will consist of the National Premises ID of the location where the group was created and a six digit numerical number reflecting the date the group was created. This format will result in unique numbers, for example: IA123456100302 (last 6 digits reflect Oct. 3, 2002).

Group/Lot ID can be achieved through complete production data; producers who do not have adequate production data to support Group/Lot ID will use a group "passport" system. Animals removed from the Group/Lot, and commingled with other animals outside of the production system will require individual ID. Production systems employing continuous flow animal movements can assign a Group/Lot ID and then record the information as described in the above data fields. The Group/Lot ID will be terminated in the event of a total depopulation of the premises. Upon repopulation, a new Group/Lot ID will be assigned to animals on the premises.

Identification Devices
The official identification of an individual animal requires the attachment of a device to the animal with the appropriate identification number printed on it or electronically encoded in the chip. The following two methods to identify animals are proposed.

Visible Identification

Basic standards for visible identification devices are contained within this document and are listed below. It is acknowledged that more details and protocols will need to be established to determine which identification devices meet the criteria for "official" devices, including the read distance of the US Shield, national number, etc.

Standard #4: Identification Methods and Devices for Official Use in Livestock
All officially approved ID tags must meet the following requirements:

- the tag must bear an official unique national number
- the tag is designed for one-time use
- the tag may not be readily altered or otherwise tampered with
- the national identification number must be easily and reliably readable
- for RFID eartags, the national number must always be printed on the tag (in the event a RFID device fails or when no reader is available)

Electronic Identification

Radio Frequency Identification (RFID) devices are the most common form of electronic identification used in animal agriculture today. At this time, the primary area of focus is to foster the adoption of national standards for the use of RFID devices in animals.

Various methods of attaching the RFID device to the animal exist, including implants, boluses, tags (eartags) and tag attachments (cylinder devices that fit over the stem of the male ear tag when applied to the animal). The most widely used method in animal agriculture is the eartag device. The utilization of the eartag method will be used as the standard RFID method until more experience is gained with the utilization of other methods. Requirements listed below for identification devices will apply equally to ID devices that incorporate RFID technology.

Standard #5: Radio Frequency Identification of Animals
Radio frequency identification devices used for official animal identification must be in compliance with:

- ISO 11784 Radio Frequency Identification of Animals - Code Structure
- ISO 11785 Radio Frequency Identification of Animals - Technical Concepts

Official RFID ear tags will be attached in the animal's left ear. Additionally, the RFID code must be printed on the RFID eartags.